

REMARKS

The non-final Office Action, mailed November 14, 2007, considered claims 1 and 3-36. Claims 1, 3-16, 17-27 and 28-36 were rejected. Claims 1-36 and 41-43 were rejected under 35 U.S.C. 103(a) as being unpatentable over Carson et al. (US PUB 2004/0093326 A1), hereinafter *Carson*, in view of Copperman et al. (U.S. 6,711,585 B1), hereinafter *Copperman*, and further in view of Szabo (US 7,181,438 B1), hereinafter *Szabo*.¹

By this amendment claims 1, 3, 5, 13, 17-19 and 28 have been amended and claims 44 and 45 have been added.² No claims have been cancelled. Accordingly, claims 1, 3-36 and 44-45 are pending, of which claims 1, 17 and 28 are the only independent claims at issue.

The present invention is generally directed to obtaining web service information for one or more related web services represented at different nodes in the taxonomy. For example, claim 1 defines receiving a request for web service information, where the request includes a user entered reference node identifier and relationship data indicating a first and a second hierarchical relationship the requested node is to have with the reference node. The user entered reference node identifier identifies a specified web service represented at a reference node within the taxonomy. The relationship data indicates that any related web service in any taxonomy having either the first or second specified hierarchical relationship with the specified web service is a related web service of interest to the user. Next, claim 1 defines extracting the reference node identifier and the relationship data from the request.

Claim 1 further defines querying one or more databases in a plurality of different taxonomies located on one or more different computer systems using the relationship data to obtain web service information for any web services having at least one the first and the second specified hierarchical relationship with the specified web service of the reference node. The web service information is presentable in a hierarchical format and the hierarchy is based on the specified web service's hierarchical relationship with the reference node and other web services in the plurality of different taxonomies, where the nodes of each database comprise at least one of a plurality of root nodes. Next, claim 1 defines receiving web service information that

¹ Although the prior art status of the cited art is not being challenged at this time, Applicant reserves the right to challenge the prior art status of the cited art at any appropriate time, should it arise. Accordingly, any arguments and amendments made herein should not be construed as acquiescing to any prior art status of the cited art.

² Support for the amendments to the claims are found throughout the specification and previously presented claims, including but not limited to the abstract, paragraphs [0007], [0009], [0050], [0055], [0057] and Figures 3 & 5.

corresponds to any related web services having at least one of the first and the second specified hierarchical relationships with the specified web service of the reference node in response to the query, where the received web service information includes the specified web service of the reference node and at least one related web service having at least one of the first and the second specified hierarchical relationships with the specified web service of reference node. The received web service information is displayable in a navigable taxonomy.

Lastly, claim 1 defines returning the received web service information to the client. The received web service information is for graphical presentation at the client to show a user relevant portions of any of the plurality of taxonomies that included related web services having at least one of the first and the second specified hierarchical relationships with the specified web service of the reference node.

Claims 17 is a method claim similar to claim 1, but from the perspective of a client. Claim 28 is a system claim similar to claim 1.

Applicants respectfully submit that the cited art of record does not anticipate or otherwise render the amended claims unpatentable for at least the reason that the cited art does not disclose, suggest, or enable each and every element of these claims.

35 U.S.C. 103 Rejections

Carson describes providing a taxonomy for mobile electronic services (MES's). *Carson* notes that, from a client's perspective, MES providers often appear and disappear at random intervals (for example, as a client is traveling in and out of wireless service cells). Thus, the availability of e-services can change frequently (par. [0009]). *Carson* describes a system for a taxonomy to describe MES's using a tree structure for organizing descriptive characteristics of the MES (par. [0010]). *Carson* further describes a method for searching MES's by searching each category of MES's (par. [0011]). Various service level identifiers may be used to supply service-related information such as rating, revenue model, and price (par. [0070]). Ultimately, *Carson* is designed to search for specific e-services and does so by searching a taxonomy in a top-down fashion, starting with the root node and extending to the leaf nodes (par. [0075]). *Carson* is silent on allowing a user to specify a reference node and finding other nodes that have a specified hierarchical relationship with the reference node.

Copperman teaches a method and system for organizing and retrieving information using taxonomies. For example, in a system where there are multiple documents, document text is

searched and associated with a corresponding taxonomy, depending on how related the text is to the taxonomy (Abs.). For example, there may be a document source taxonomy and an intended audience taxonomy (Figs. 10 & 11, Col. 30:32-Col. 31:22). *Copperman* uses initial taxonomy tags to indicate the broad concept for the search and interest taxonomy tags that specify how the results are to be ranked as determined by the strength of association between the concept and the document text (Col. 6:46-63). The more related the document text is to the concept represented by the initial taxonomy tag, the higher the document will rank in relation to that concept in the taxonomy. Like *Carson* however, *Copperman* is designed to search for specific informational tags in a top-down fashion, starting at the initial taxonomy tag and extending to those leaf nodes below the initial taxonomy tag. *Copperman* is likewise silent on allowing a user to specify a reference node and finding other nodes that have a specified hierarchical relationship with the reference node.

Szabo is cited to show a web service being displayed in a navigable taxonomy. *Szabo*, describes a computer user interface navigational system for examining data units stored in the memory of a computer system (Col. 17:19-34). In the navigational system, the user interface shows a visual representation of the hierarchical structure of the data units in computer system memory. *Szabo*, however, does not mention web services or services of any kind. *Szabo* further fails to mention navigating a system that has multiple different nodes in different taxonomies, where each node offers (potentially) different web services. Moreover, similar to *Carson* and *Copperman*, *Szabo* is silent on allowing a user to specify a reference node and finding other nodes that have a specified hierarchical relationship with the reference node.

Thus, none of the cited art teaches or suggests receiving a request for web service information, where the request includes a user entered reference node identifier and relationship data indicating a first and a second hierarchical relationship the requested node is to have with the reference node. The user entered reference node identifier identifies a specified web service represented at a reference node within the taxonomy. The relationship data indicates that any related web service in any taxonomy having either the first or second specified hierarchical relationship with the specified web service is a related web service of interest to the user, as recited in claim 1.

Furthermore, none of the cited art teaches or suggests querying one or more databases in a plurality of different taxonomies located on one or more different computer systems using the

relationship data to obtain web service information for any web services having at least one the first and the second specified hierarchical relationship with the specified web service of the reference node. The web service information is presentable in a hierarchical format and the hierarchy is based on the specified web service's hierarchical relationship with the reference node and other web services in the plurality of different taxonomies, as recited in claim 1. At least for either of these reasons, claim 1 patentably defines over the art of record. At least for either of these reasons, claims 17 and 28 also patentably define over the art of record. Since each of the dependent claims depend from one of claims 1, 17 and 28, each of the dependent claims also patentably define over the art of record for at least either of the same reasons.

Although each of the dependent claims patentably define over the prior art of record for the same reasons as their corresponding base claims, many of the dependent claims also independently distinguish over the prior art of record. For example, the prior art of record fails to disclose or suggest wherein the received web service information corresponds to an equivalent node in second, different taxonomy, the equivalent node providing the same web service as the reference node as indicated in an equivalence relationship tag, as recited in claim 44.

Objection to the Specification

The specification was objected to as failing to provide proper antecedent basis for the claimed subject matter. Claims 1, 17 and 28 have been amended to conform with the specification objection. Support for the claims as amended is provided in at least paragraphs [0008], [0009], [0041], [0044], [0050] and [0056]. Accordingly, Applicants respectfully request that the objection to the specification be withdrawn.

In view of the foregoing, Applicant respectfully submits that the other rejections to the claims are now moot and do not, therefore, need to be addressed individually at this time. It will be appreciated, however, that this should not be construed as Applicant acquiescing to any of the purported teachings or assertions made in the last action regarding the cited art or the pending application, including any official notice. Instead, Applicant reserves the right to challenge any of the purported teachings or assertions made in the last action at any appropriate time in the future, should the need arise. Furthermore, to the extent that the Examiner has relied on any Official Notice, explicitly or implicitly, Applicant specifically requests that the Examiner provide references supporting the teachings officially noticed, as well as the required motivation or suggestion to combine the relied upon notice with the other art of record.

In the event that the Examiner finds remaining impediment to a prompt allowance of this application that may be clarified through a telephone interview, the Examiner is requested to contact the undersigned attorney at (801) 533-9800.

Dated this 14th day of February 2008.

Respectfully submitted,

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